AMENDMENTS TO THE CLAIMS

Claim 1. (Currently Amended)

A signal discrimination apparatus for classifying a type of an input signal into a voice and

a data, the discrimination apparatus comprising:

first <u>detector</u> ~~detection means~~ for detecting a tone signal of a specific frequency from said

input signal;

second <u>detector</u> ~~detection means~~ for detecting a specific signal used in a start-up

procedure of a modem signal from said input signal;

<u>a discriminator</u> ~~discrimination means~~ for classifying the type of said input signal based on

outputs of said first and second <u>detectors</u> ~~detection means~~ <u>and flagging the specific signal when</u>

<u>detected</u>;

wherein, when said specific signal has not been detected, a signal discrimination result in

the case of said tone signal being detected is made to be a voice state, and when said specific

signal has been detected, a signal discrimination result in the case of said tone signal being

detected is not made to be a voice state.

Claim 2. (Original)

The signal discrimination apparatus according to claim 1, wherein said start-up procedure

is a V.34 procedure.

Claim 3. (Original)

The signal discrimination apparatus according to claim 1, wherein said start-up procedure is a V.8 procedure.

Claim 4. (Currently Amended)

The signal discrimination apparatus according to claim 1, wherein said second detector detection means is an ANSam signal detector for detecting the ANSam signal in the V.8 procedure.

Claim 5. (Currently Amended)

The signal discrimination apparatus according to claim 4, wherein, instead of said ANSam signal detector, a third detector detection means for detecting a tone signal of a specific frequency from said input signal is used.

Claim 6. (Currently Amended)

The signal discrimination apparatus according to claim 5, wherein the tone signal of the specific frequency which said third detector detection means detects is a tone signal of 2100 Hz.

Claim 7. (Currently Amended)

The signal discrimination apparatus according to claim 1, wherein said second detector detection means is a V.21 modem signal detector which detects a V.21 (channel No. 2) modem signal in the V.8 procedure.

Claim 8. (Currently Amended)

The signal discrimination apparatus according to claim 1, wherein said second ~~detection~~ detector ~~means~~ is a JM signal detector which detects a JM signal in the V.8 procedure.

Claim 9. (Currently Amended)

The signal discrimination apparatus according to claim 1, wherein said second ~~detection~~ detector ~~means~~ is an INFO0a signal detector which detects an INFO0a signal in the start-up procedure of the modem.

Claim 10. (Original)

The signal discrimination apparatus according to claim 1, further comprising an activity detector for judging an active/inactive state of said input signal, wherein, after a specific signal used in the start-up procedure of the modem signal has been detected, when an inactive state continues for a predetermined time, a detection state of said specific signal is initialized.

Claim 11. (Original)

The signal discrimination apparatus according to claim 1, further comprising a first activity detector for judging an active/inactive state of a transmitting side signal and a second activity detector for judging an active/inactive state of a receiving side signal, wherein, after a specific signal used in the start-up procedure of the modem signal has been detected, when both

the transmitting side and the receiving side continue to be in an inactive state for a predetermined time, the detection state of said specific signal is initialized.

Claim 12. (Original)

The signal discrimination apparatus according to claim 1, further comprising a continuity check test tone detector for detecting a tone signal of a specific frequency sent for the purpose of a continuity check test of a channel from said input signal, wherein, after said specific signal used for the start-up procedure of modem signal has been detected, when the tone signal of the specific frequency sent for the purpose of the continuity check test of said channel is detected, the detection state of said specific signal is initialized.

Claim 13. (Currently Amended)

The signal discrimination apparatus according to claim 1, wherein the tone signal of the specific frequency which said first detector ~~detection means~~ detects is a tone signal of 2400 Hz.

Claim 14. (Original)

A signal discrimination method for classifying a type of an input signal into a voice and a data,

said signal discrimination method including:

a first step of detecting a tone signal of a specific frequency from said input signal:

a second step of detecting a specific signal used in a start-up procedure of a modem signal from said input signal; and

a third step of setting a specific signal detection flag when said specific signal is detected,

wherein, when said specific signal detection flag is not set, a signal discrimination result

in the case of the tone signal of said specific frequency being detected is made to be a voice state,

and when said specific signal detection flag is set, a signal discrimination result in the case of the

tone signal of said specific frequency being detected is not made to be a voice state.

Claim 15. (Original)

The signal discrimination method according to claim 14, wherein said start-up procedure

is a V.34 procedure.

Claim 16. (Original)

The signal discrimination method according to claim 14, wherein said start-up procedure

is a V.8 procedure.

Claim 17. (Original)

The signal discrimination method according to claim 14, wherein said specific signal is

an ANSam signal in the V.8 procedure.

Claim 18. (Original)

The signal discrimination method according to claim 14, wherein said specific signal is a

V.21 (channel No. 2) modem signal in the V.8 procedure.

Claim 19. (Original)

The signal discrimination method according to claim 14, wherein said specific signal is an INFO0a signal in the start-up procedure of the modem.

Claim 20. (Original)

The signal discrimination method according to claim 14, wherein, after said specific signal used in the start-up procedure of modem signal has been detected, when both a transmitting side and a receiving side continue to be in an inactive state for a predetermined time, a detection state of said specific signal is initialized.

Claim 21. (Original)

The signal discrimination method according to claim 14, further comprising a fourth step of detecting a tone signal of a specific frequency sent for the purpose of a continuity check test of a channel from said input signal, wherein, after said specific signal used for the start-up procedure of modem signal has been detected, when the tone signal of the specific frequency sent for the purpose of the continuity check test of said channel is detected, the detection state of said specific signal is initialized.

Claim 22. (Original)

The signal discrimination method according to claim 14, wherein the tone signal of the specific frequency detected in said first step is a tone signal of 2400 Hz.

Claim 23. (Currently Amended)

A transmission equipment comprising:

a signal discrimination apparatus according to claim 1 for classifying a type of an input signal into a voice and a data;

an encoder ~~encoding means~~ for encoding said input signal at an adequate encoding bit rate in a low bit rate encoding fashion based on a signal discrimination result of said signal discrimination apparatus;

a transmitter ~~transmitting means~~ for transmitting encoded data encoded by said ~~encoding means~~ encoder;

a receiver ~~receiving means~~ for receiving the encoded data sent by an opposed equipment side; and

a decoder ~~decoding means~~ for decoding the encoded data received from said receiver ~~receiving means~~.